Determination of Public Land (Rangeland) Health for 64057 C G LONGELY

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these Standards.

Field assessment worksheets and other available data which evaluate the local indicators, were completed for this allotment. Based on the assessments, it is my determination that the Public Lands within the C G Longely Allotment #64057 meet the Upland Sites Standard and (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard. There are no Public Land riparian areas on this allotment, therefore this Standard will not addressed.

/s/ T. R. KREAGER

10/17/2003

Assistant Field Manager

Date

Standards of Public Land Health Evaluation of 64057 C G LONGELY Allotment [08/13/2003]

The Roswell Field Office conducted rangeland health assessments at three study sites within the C G LONGELY Allotment #64057. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area		UPLAND			BIOTIC		RIPARIAN		
or Assessment Area	Meets			Meets	an	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
64057-#1-F052	X			X			N/A		
64057-#2-F053	X			X			N/A		
64057-#3-F050	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for the C G Longely allotment; 10 of these assessed met Ranch; 10 of these assessed soil/site stability, 11 assessed hydrologic functions and 13 assessed biotic integrity. These qualitative assessments along with quantitative information from long-term monitoring studies on 3 study areas, were utilized to assess the rangeland health of the public land within the allotment. These quantitative evaluations were performed by the Roswell Field office staff starting in the early 1980's. These included ground and vegetative cover and composition, production, frequency, and ecological condition as calculated from these collections which have been scheduled approximately every 5 years.

The #3 pasture has rated moderate for bareground. The #1 pasture has experienced drought, water erosion, and wind erosion conditions that has possibly increased the amount of bare ground. Sand and gravel, clay and silt that are located on the surface are Quaternary terrace gravel deposits. Rock outcrops of gypsum and dolomite that occurr in the area are from the Seven Rivers Formation. Allotment 64057 lies northeast of Roswell, between the "Old Clovis Highway" and Bitter Lakes National Wildlife Refuge. The allotment contains 5 pastures, with intermingled land status. The SD-3 Salty Bottomland Range Site is consistent across the allotment, and in most areas is sub irrigated to some extent. Both Sites 1 & 2 were more influenced by the sub-irrigation, but had very little over surface flow or overflow movement of water.

This allotment is currently "Closed to Grazing" per a Decision in the Roswell Resource Management Plan. Due to scattered tracts of private lands located within the allotment which are being developed for home sites, continuity of the allotment would make it very

difficult to manage for grazing stock. Grazing has not been authorized on the allotment since November, 1996. Exterior fences have not been well maintained over time and most of them are in serious decay. Also due to the proximity to Roswell, there is an apparent use by OHV's and illegal dumping is occurring. Both Sites 1 & 2 were more influenced by the sub-irrigation, but had very little over surface flow or overflow movement of water.

Site #1 is located between the railroad and the old Clovis highway, has good ground cover, and probably due to some sub irrigation vegetative production has been good. All indicators rated here as Slight to None, or Slight to Moderate with the exception of Annual production. Annual production as compared to the ESD was lower than expected, probably due to recent drought conditions. However, annual production currently appeared higher than the last monitoring studies would indicate.

Site #2 is now being influenced by the construction of fencing around a new home. Production and cover is good. All indicators again were either Slight to None or Slight to Moderate. The shrub component on Functional/Structural was low, but was still within the site description.

Site #3 is still under the influence of an historical prairie dog town, now abandoned. Invasive plants such as russian thisle and salt cedar predominate at the study location. Again, due to the prairie dogs, there is a high amount of bare ground and a low amount of healthy shrubs are present, while grass species are very limited, both in number and in production. Annual production has consistently been well below the Ecological Site Description levels throughout the entire time from of studies. The amount of Bare ground seems high, but is still within the parameters of the Range Site description.

It is the professional opinion of the assessment team that the allotment meets the Upland and Biotic Standards for Rangeland Health.

Recommendations: It is the recommendation of the interdisciplinary staff that if grazing is to occur on the allotment, that the fences must be re-established, and if possible the public lands be exchanged so as to better block them for ease of management of the resources. This recommendation may also hold forth even if grazing is not authorized, and the allotment is set aside for other resource use alone. Some problems that will have to be dealt with on this allotment and the allotment (64056) to the north are illegal dumping and OHV use.

	SITE 64057-#1-F052										
Legal I	and Desc	SENW 31 0090S 02 Meridian 23	250E		Acreag	e 0					
	Ecosite	042CY033NM SALTY BOTTOMLAND S		Photo Taken		n Y					
7	Vatershed	13060007010 GOPI	HER								
	Observers	R. FRENCH, H. MI	LLER	Obse	rvation Dat	e 08/28/2	003				
County So	11 11111/01/	NM644 CHAVES NORTH		Soi	l Var/Taxa	d					
Soil	Map Unit	HhA		Soil	Γaxon Nam	e HOLLO	OMEX				
Tex	ture Class	NM644 L			Soil Phas	e HOLLO	OMEX				
Texture	Modifier	NM644 LOAM									
Obse Annual Pre	erved Avg ecipitation			Observed A Season l	vg Growin Precipitatio						
	A Annual ecipitation		11.39	NOAA Gro	wing Seaso Precipitatio		7.05				
NOAA Avg Annual Precipitation			12.17		vg Growin Precipitatio	- ∥	9.81				
	ances and imal Use:										
Part 2. Att	ributes an	d Indicators									
				ture from Ecological Site ption/Ecological Reference Areas							
Attribute	Indicators	S	Extren	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight				
SH	Rills						X				
Comments:											
SH	Water Flo	ow Patterns					X				
Comments:											
SH	Pedestals	and/or Terracettes					X				
Comments:											
SH	Bare Gro	und					X				
Comments:											
SH	Gullies						X				

RFOs Upland and Biotic Standard Assessment Summary Worksheet

Comments:					
S	Wind-scoured, Blowouts, and/or Deposition Areas				X
Comments:					
Н	Litter Movement			X	
Comments:					
SHB	Soil Surface Resistance to Erosion				X
Comments:					
SHB	Soil Surface Loss or Degradation				X
Comments:					
Н	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X
Comments:					
SHB	Compaction Layer				X
Comments:					
В	Functional/Structural Groups				X
Comments:					
В	Plant Mortality/Decadence				X
Comments:					
НВ	Litter Amount				X
Comments:					
В	Annual Production		X		
Comments:	Vegetative production at time data showed.	of assessment a	ppears higher t	than most r	ecent
В	Invasive Plants			X	
Comments:	Species include yellow spine the	nistle, goldenro	d, cholla & sna	keweed	
В	Reproductive Capability of Perennial Plants				X
Comments:					
S	Physical/Chemical/Biological Crusts				X
Comments:					
В	Wildlife Habitat				X

Comments:				
В	Wildlife Populations			X
Comments:				
	Special Status Species Habitat			X
Comments:				
	Special Status Species Populations			X
Comments:				

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	0	10
Н	Hydrologic	0	0	0	1	10
В	Biotic	0	0	1	1	11

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	1	12

Site Notes: This study is outside of what our records indicate as the Allotment boundary.

and may actually be inside of Allotment 64056; which is also closed to grazing. The study is actually located on private lands.

RFOs	Upland a	and Biotic Standa	rd Ass	sessment S	ummary V	Worksho	eet
		SITE 64	057-#2	2-F053			
Legal I	and Liecci	NWSE 31 0090S 02 Meridian 23	250E		Acreag	e 416	
	Ecosite 042CY033NM SAL7 BOTTOMLAND S		TY		Photo Take	n Y	
Watershed		13060007010 GOPF	HER				
	Observers	R. FRENCH, H. MI	LLER	Obse	rvation Dat	e 08/28/2	.003
County Soil Survey		NM644 CHAVES NORTH		So	il Var/Taxa	d	
Soil	Map Unit	HhA		Soil '	Taxon Nam	e HOLLO	OMEX
Texture Class		NM644 L			Soil Phas	e HOLLO	OMEX
Texture	Modifier	NM644 LOAM					
Observed Avg Annual Precipitation		C		Observed Avg Growing Season Precipitation			
NOAA Annual Precipitation		11.39		NOAA Growing Season Precipitation			7.05
NOAA Av Pre	g Annual ecipitation				vg Growin Precipitatio		9.81
		This site has not bee authorized.	en graze	d in several	years. No st	ock is	
Part 2. Att	ributes an	d Indicators					
				ure from Ecoption/Ecolog			
Attribute	Indicators	S	Extren	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
			1		1		
SH	Rills						X
Comments:			1		1		
SH	Water Flo	ow Patterns					X
Comments:			1				1
SH	Pedestals	and/or Terracettes					X
Comments:							
SH	Bare Gro	und					X
Comments:							

SH	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
Н	Litter Movement					X
Comments:						
SHB	Soil Surface Resistance to Erosion					X
Comments:						
SHB	Soil Surface Loss or Degradation					X
Comments:						
Н	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
SHB	Compaction Layer					X
Comments:						
В	Functional/Structural Groups					X
Comments:	very little shrub component, bu	ıt within e	expectation	n of the site	2	
В	Plant Mortality/Decadence					X
Comments:						
НВ	Litter Amount					X
Comments:						
В	Annual Production				X	
Comments:						
В	Invasive Plants					X
Comments:	This indicator is moving towar older plants.	d slight, s	ome salt c	edar are pr	esent but a	ıre
В	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:						

В	Wildlife Habitat					X					
Comments	:										
В	Wildlife Populations					X					
Comments	:										
В	Special Status Species Habitat	- I X									
Comments											
В	Special Status Species Populations					X					
Comments	Plover & prairie dogs										
Part 3. Summary											
Part 3. Su	mmary										
A. Indicate attributes l	or Summary - Each of the indicelow. An indicator is placed in Standard Attributes.										
A. Indicate attributes l	or Summary - Each of the indicator is placed in					None to					
A. Indicate attributes I each of the Standard	or Summary - Each of the indicator is placed in	n a category	(columns Moderate to) above an	d summed Slight to	None to					
A. Indicate attributes I each of the Standard Attribute	or Summary - Each of the indicator is placed in estandard Attributes.	n a category Extreme	Moderate to Extreme) above an	Slight to Moderate	None to Slight					

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	0	13

Site Notes: This study is located on private land, and the usual mapped route to the study is blocked by fences constructed around small acreage private land holdings. The study may also be outside of Allotment 64057, as shown in our records. The study may be within Allotment 64056, which is also closed to grazing.

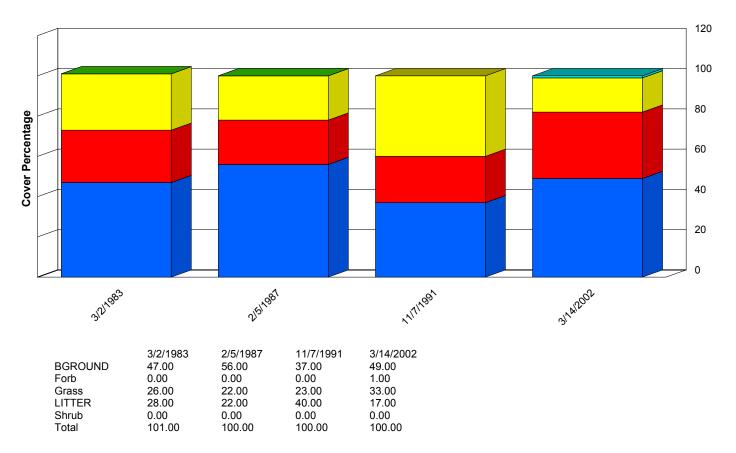
RFOs	Uplai	nd and Biotic Standa	rd A	sses	sment Su	ımmary `	Workshe	eet
		SITE 64	057-	#3-I	F050			
Legal Land	Desc	NWNE 7 0100S 0250E Meridian 23			Acreage		584	
Е	cosite	942CY033NM SALTY BOTTOMLAND S			Ph	oto Taken	N	
Wate	rshed	13060007010 GOPHER	3060007010 GOPHER					
Obse	ervers	R. FRENCH, H. MILLE	ER		Observ	ation Date	08/28/200)3
	County Soil NM644 CHAVES NORTH		TH		Soil `	Var/Taxad		
Soil Map	Soil Map Unit HhA			Soil Ta	xon Name	HOLLON	1EX	
Texture	Class	NM644 L				Soil Phase	HOLLON	1EX
Texture Mo	difier	NM644 LOAM						
Observed Avg Annual Precipitation					oserved Avg Growing Season Precipitation			
NOAA A Precipi		11.39		NO	NOAA Growing Season Precipitation		II / U	
NOAA A Precipi	nnual	12.17				g Growing ecipitation		
Disturbance Animal		This site has not been gr Low vegetation amounts due to historical prairie	and	high	amounts of			
Part 2. Attı	ribute	s and Indicators						
			Dep Des	artur cripti	e from Eco on/Ecolog	ological Sit ical Refere	ence Areas	
Attribute	Indic	ators	Extr		Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills							X
Comments:								
SH	Wate	r Flow Patterns						X
Comments:								
SH	Pedes	stals and/or Terracettes						X
C	Movi	ng toward slight, due to j	orairi	e dos	town vic	inity and so	ome wind	action.

SH	Bare Ground		X		
Comments:	Re: Prairie dog town vicinity			,	
SH	Gullies				X
Comments:					
S	Wind-scoured, Blowouts, and/or Deposition Areas			X	
Comments:	Re: Prairie dog town vicinity				
Н	Litter Movement			X	
Comments:					
SHB	Soil Surface Resistance to Erosion			X	
Comments:					
SHB	Soil Surface Loss or Degradation			X	
Comments:					
Н	Plant Community Composition and Distribution Relative to Infiltration and Runoff			X	
Comments:					
SHB	Compaction Layer				X
Comments:					
В	Functional/Structural Groups				X
Comments:	Shrub component is almost ab	sent, according to	the site guid	e.	
В	Plant Mortality/Decadence				X
Comments:					
НВ	Litter Amount			X	
Comments:					
В	Annual Production		X		
Comments:	There is a lot of production tie because of the historical presentudy.				
В	Invasive Plants			X	
Comments:	This is a disturbed site and is represent here.	now just coming ba	ick, A lot of	russian th	istle is
В	Reproductive Capability of Perennial Plants				X

Comments:								
S	Physical/Chemical/Biological Crusts			X				
Comments:								
В	Wildlife Habitat				X			
Comments:	Being fragmented by rural dev	elopment						
В	Wildlife Populations				X			
Comments:								
В	Special Status Species Habitat					X		
Comments:								
В	Special Status Species Populations					X		
Comments:								
Part 3. Sun	ımary							
attributes be	Summary - Each of the indicate blow. An indicator is placed in a Standard Attributes.							
			Moderate			NI		
Standard Attribute		Extreme	to Extreme	Moderate	Slight to Moderate	None to Slight		
S	Soil	0	0	2	3	5		
Н	Hydrologic	0	0	1	5	5		
В	Biotic	0	0	1	6	6		
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team. Does Not May Need Meets								
Attribute	Rationale			ILJOES INOT		1		

		Info	
Soil	0	2	8
Hydrologic	0	1	10
Biotic	0	1	12
Site Notes:			

Ground Cover Trends



Forb
Shrub
LITTER

Grass
BGROUND

Report Parameters

SITE NAME LIKE ON/AFTER ON/BEFORE 64057-#1-F052 10/01/1982 09/30/2002

Functional / Structural Groups

Report Parameters

 SITE NAME LIKE
 64057-#1-F052

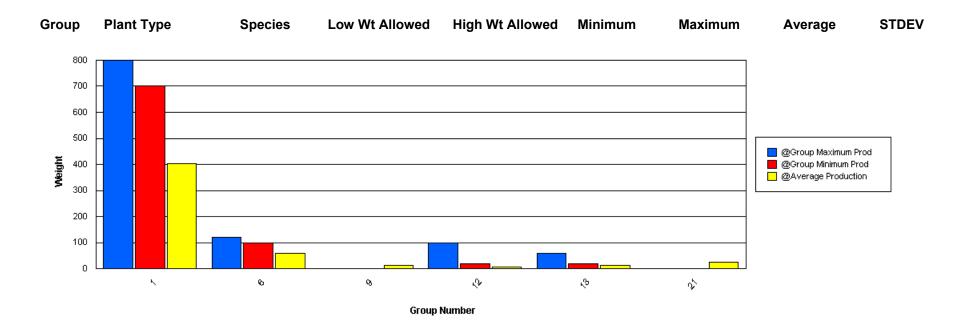
 ON/AFTER
 10/01/1982

 ON/BEFORE
 09/30/2002

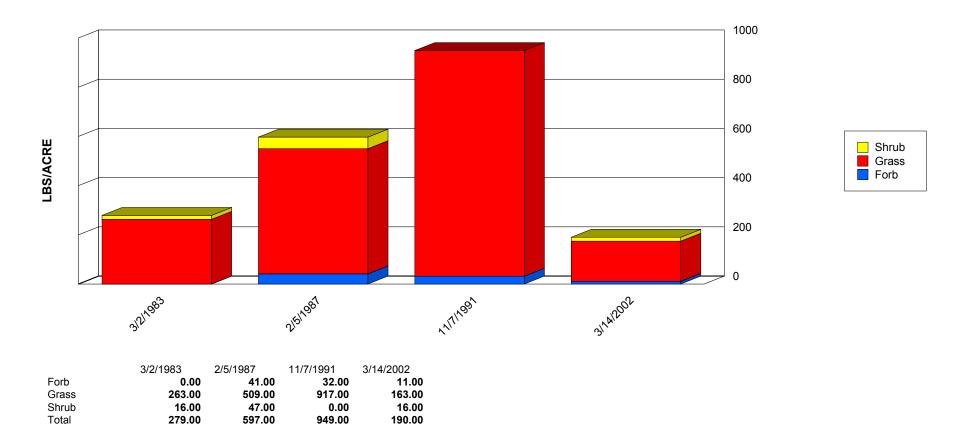
MIN LBS TO GRAPH 3

SELECTED ECOSITE 042CY033NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	SPAI	700	800	94.00	853.00	404.00	282.98
5	Grass	DISP	300	400	0.00	1.00	0.50	0.50
6	Grass	ARIST	100	120	2.00	39.00	15.67	16.58
6	Grass	MUAR	100	120	0.00	52.00	19.33	23.23
6	Grass	MUAR2	100	120	0.00	24.00	8.67	10.87
6	Grass	PAHA	100	120	0.00	30.00	10.67	13.70
6	Grass	SPCR	100	120	0.00	10.00	3.33	4.71
9	Grass	SPNE	0	0	0.00	39.00	13.67	17.93
12	Forb	AAFF	20	100	0.00	19.00	8.00	8.28
13	Forb	HAHE	20	60	0.00	28.00	9.33	13.20
13	Forb	PPFF	20	60	3.00	4.00	3.50	0.50
20	Shrub	OPUNT	0	20	0.00	1.00	0.50	0.50
21	Shrub	GUSA2	0	0	15.00	47.00	25.67	15.08



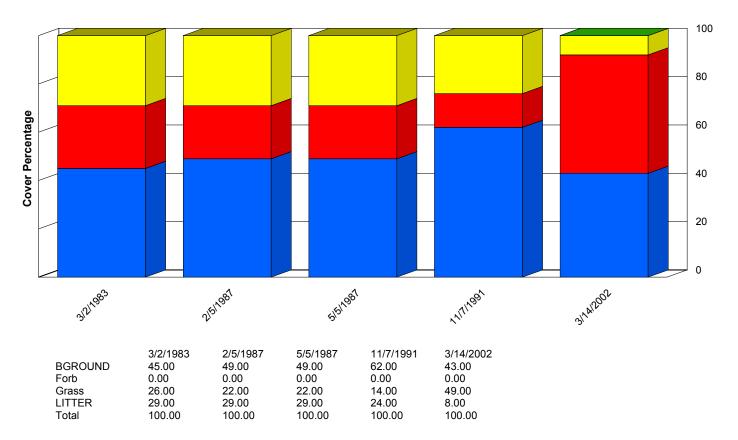
Production Lbs/Acre Trends



Report Parameters

SITE NAME LIKE 64057-#1-F052 ON/AFTER 10/01/1982 ON/BEFORE 09/30/2002

Ground Cover Trends



Forb
LITTER
Grass
BGROUND

Report Parameters

SITE NAME LIKE 64057-#2-F053 ON/AFTER 10/01/1982 ON/BEFORE 09/30/2002

Functional / Structural Groups

Report Parameters

 SITE NAME LIKE
 64057-#2-F053

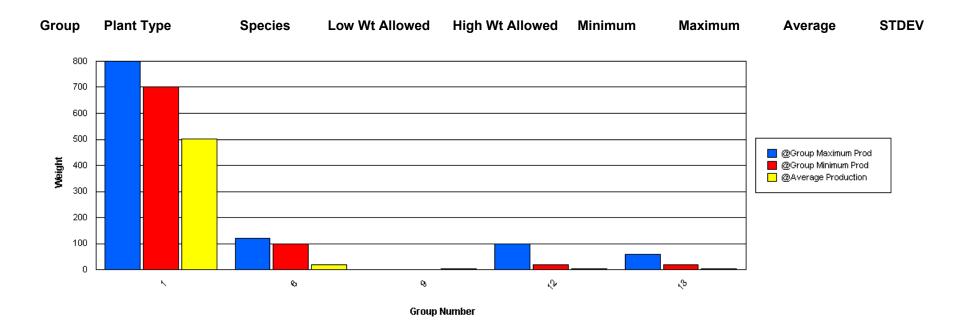
 ON/AFTER
 10/01/1982

 ON/BEFORE
 09/30/2002

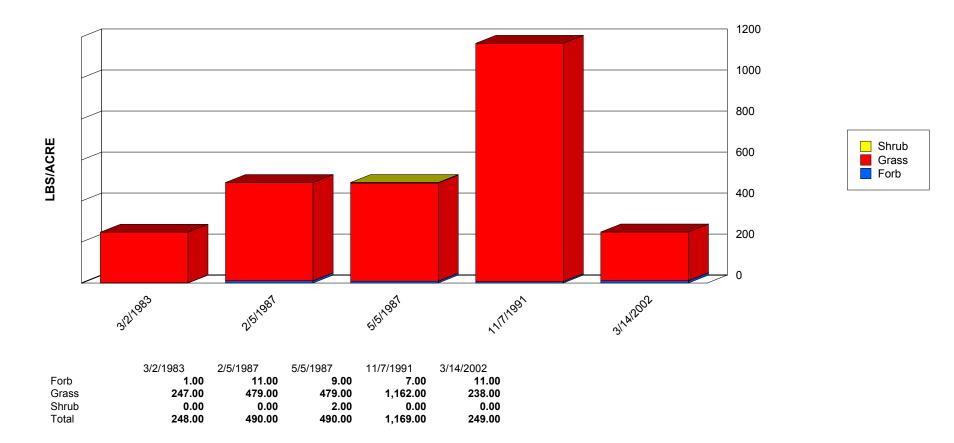
MIN LBS TO GRAPH 3

SELECTED ECOSITE 042CY033NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	SPAI	700	800	204.00	1,120.00	500.80	328.79
6	Grass	BOBR	100	120	10.00	22.00	16.00	6.00
6	Grass	SIHY	100	120	0.00	5.00	2.50	2.50
9	Grass	SPNE	0	0	0.00	10.00	5.00	3.16
12	Forb	AAFF	20	100	0.00	9.00	4.20	3.97
13	Forb	COCA2	20	60	0.00	2.00	0.50	0.87
13	Forb	PPFF	20	60	3.00	5.00	4.00	1.00



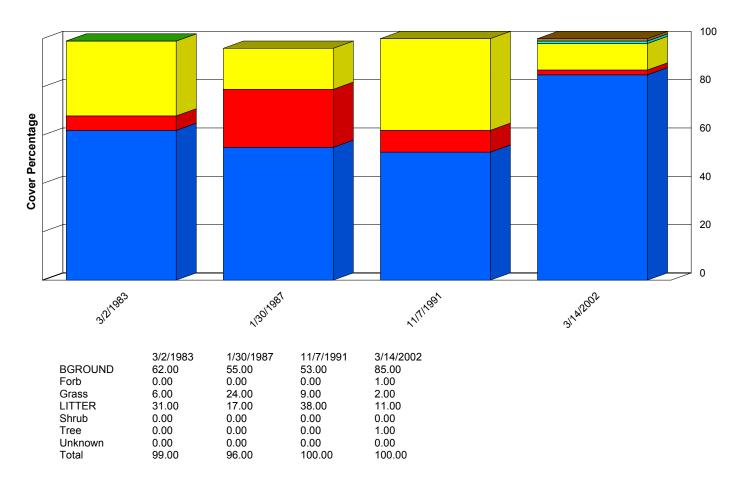
Production Lbs/Acre Trends



Report Parameters

SITE NAME LIKE 64057-#2-F053 ON/AFTER 10/01/1982 ON/BEFORE 09/30/2002

Ground Cover Trends



Tree

Shrub
Forb
Unknown
LITTER

Grass
BGROUND

Report Parameters

SITE NAME LIKE 64057-#3-F050 ON/AFTER 10/01/1982 ON/BEFORE 09/30/2002

Functional / Structural Groups

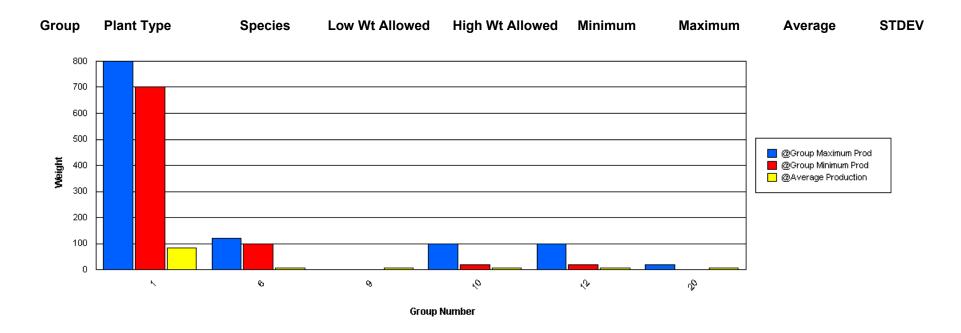
Report Parameters

SITE NAME LIKE 64057-#3-F050 ON/AFTER 10/01/1982 ON/BEFORE 09/30/2002

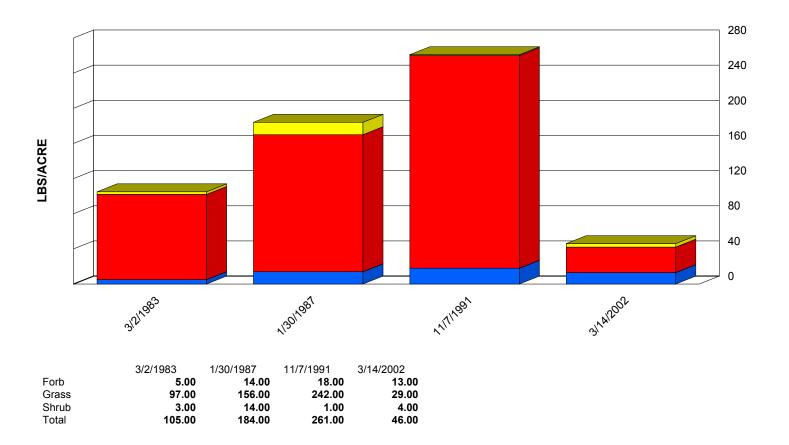
MIN LBS TO GRAPH

SELECTED ECOSITE 042CY033NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	SPAI	700	800	19.00	118.00	83.75	38.28
6	Grass	ARIST	100	120	0.00	18.00	6.00	7.07
6	Grass	BOBR	100	120	0.00	2.00	0.67	0.94
6	Grass	STNE2	100	120	0.00	2.00	0.67	0.94
9	Grass	ERPU8	0	0	0.00	16.00	6.75	6.30
10	Forb	SAKA	20	100	4.00	10.00	6.33	2.62
12	Forb	AAFF	20	100	0.00	17.00	6.75	6.87
13	Forb	PPFF	20	60	1.00	3.00	2.00	1.00
20	Shrub	CHRYS9	0	20	0.00	3.00	1.50	1.50
20	Shrub	PPSS	0	20	0.00	13.00	4.33	6.13
21	Shrub	GUSA2	0	0	0.00	4.00	1.50	1.50



Production Lbs/Acre Trends



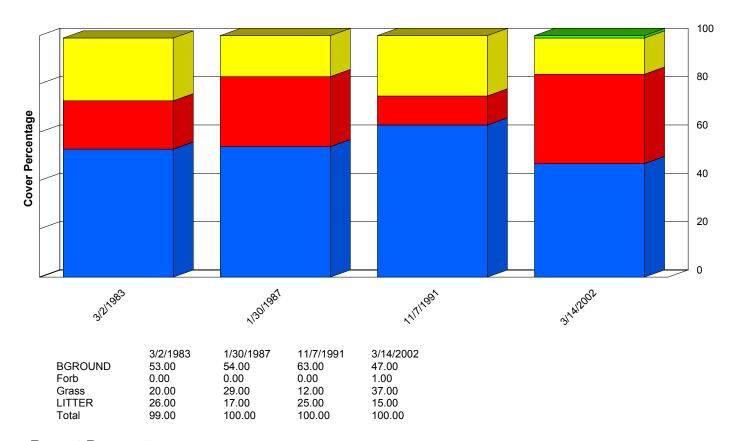
Shrub Grass

Forb

Report Parameters

SITE NAME LIKE 64057-#3-F050 ON/AFTER 10/01/1982 ON/BEFORE 09/30/2002

Ground Cover Trends



Forb
LITTER
Grass
BGROUND

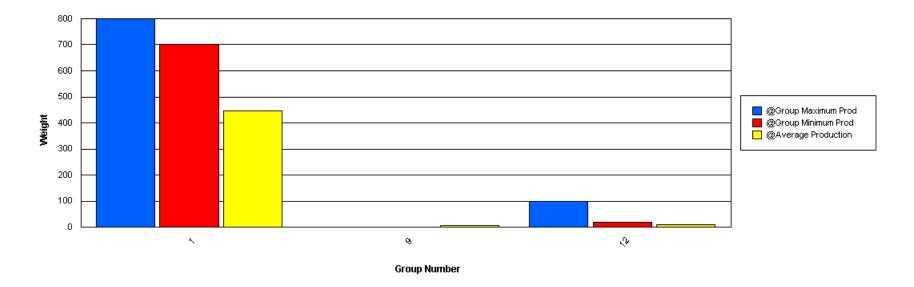
Report Parameters

SITE NAME LIKE 64057-#5-F051 ON/AFTER 10/01/1982 ON/BEFORE 09/30/2002

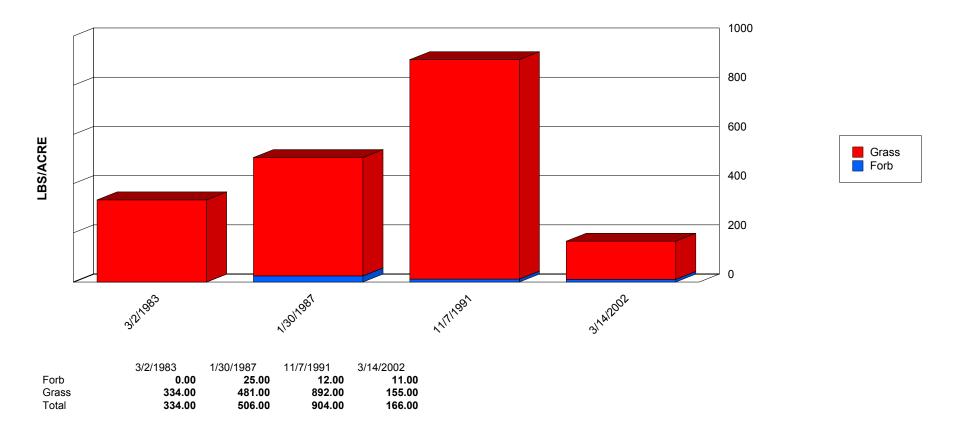
Functional / Structural Groups

Report Parameters SITE NAME LIKE 64057-#5-F051 ON/AFTER 10/01/1982 ON/BEFORE 09/30/2002 MIN LBS TO GRAPH 3 SELECTED ECOSITE 042CY033NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	SPAI	700	800	130.00	850.00	446.50	262.95
9	Grass	SPNE	0	0	0.00	24.00	8.25	9.60
12	Forb	AAFF	20	100	0.00	25.00	8.50	10.21



Production Lbs/Acre Trends

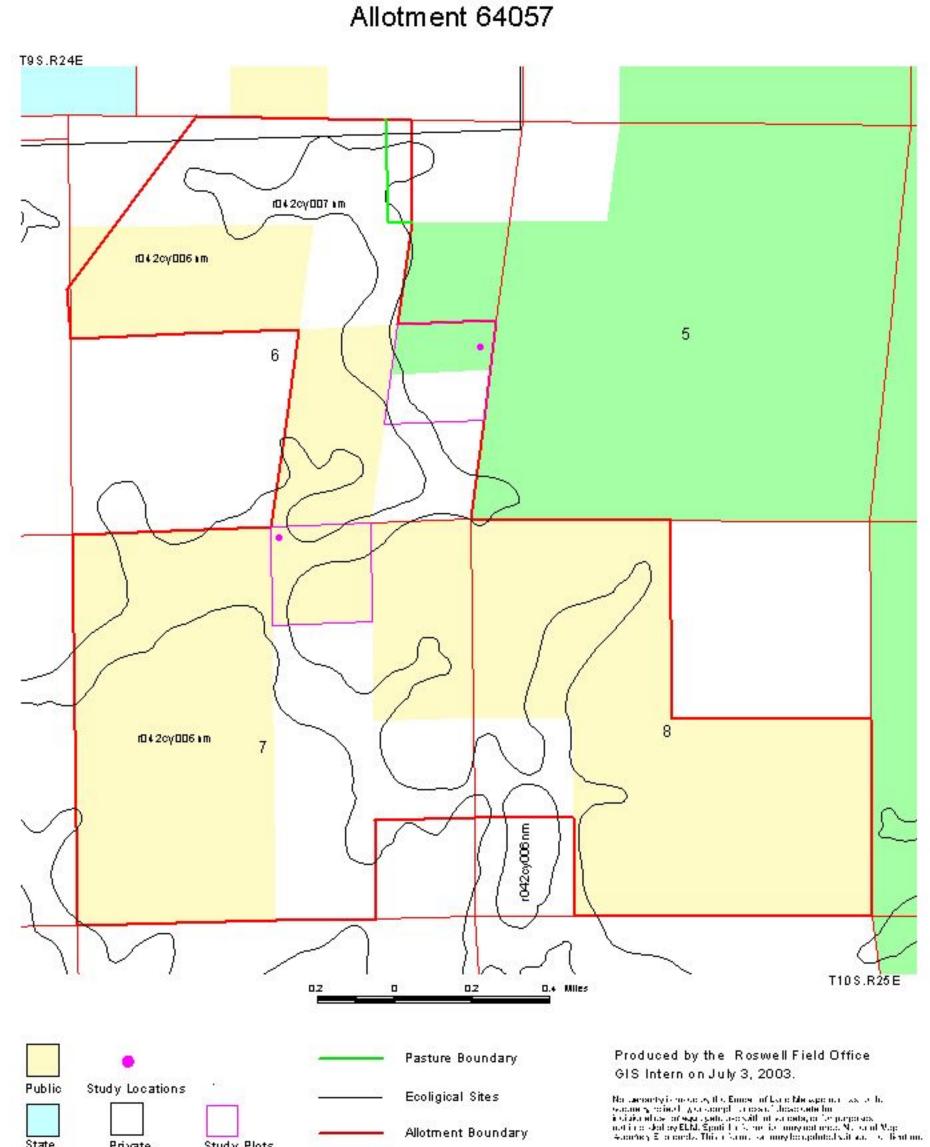


Report Parameters

SITE NAME LIKE 64057-#5-F051 ON/AFTER 10/01/1982 ON/BEFORE 09/30/2002

Rangeland Health Assessment **Ecological Sites**





Allotment Boundary

Study Plots

Private

Rangeland Health Assessment Soil Mapping Units Allotment - 64057 Нр Ηо Hp T108.R25E 0.2 0.4 Miles Study Plots Produced by the Roswell Field Office GIS Specialist on June 30, 2003. 40 Acres Study Locations Allotment Boundary Not woundly is medically the Burls that Danc Management as local collections of the appurately reliability or completeness of these data for inclinitional assume aggregations on it in other reliabilities are aggregations on it in other reliabilities and Map Accesses y Standards. This informs identify the operation of the authorities ion. Soil Mapping Units State Private Public FW/S